

PATENT SPECIFICATION

466,901

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PROVISIONAL SPECIFICATION

Improvements in or relating to Exercising Apparatus

I, LESLIE WHITTINGTON LONDON, 51, Vicarage Road, Kings Heath, Birmingham 14, of British Nationality, do hereby declare the nature of this invention to be as follows:—

This invention relates to exercising apparatus which involves movement of the body and arms resembling those effected when rowing or sculling. The apparatus is of a type wherein a tubular spine is fitted with a footboard and moving seat and a pair of hand-grips or handles connected thereto by extensible attachments. The present invention is designed to provide a simple, compact and inexpensive apparatus which can be used as an indoor exerciser.

According to this invention the apparatus comprises a metal tubular spine detachably jointed in the middle and resting along the floor for the greater part of its length. The forward part being bent up from the floor to provide a support at a certain angle for the footboard and then passing along parallel with the floor for a space and is completed by being curved down so that the extreme end stands upon the floor. Two metal loops or the like are affixed to the front of the tube as anchors for the extensible attachments. The straight portion of the tube and the extreme forward end have non-slipping feet.

To the said loops are connected a pair of extensible attachments in the form of tension springs or rubber strands, one at each side of the tube, these extensible attachments being attached thereto by detachable clips or other means and having terminal handles or hand-grips.

The footboard of wood, metal or other suitable material is slightly domed on the front surface to better fit the underside of the operator's feet. The footboard is detachably fitted to the supporting part of the tube with one or more bolts passing through same and the tube, being secured by nuts on the underside of the tube. On the underside of the footboard are two vertical raised strips between which is formed a channel, which in conjunction with the bolts, holds the raised part of the tube in a vertical position. The bottom edge of the footboard is notched out

[Price

so that it drops over the straight portion of the tube and rests upon the floor. 55

The seat of wood, metal or other suitable material is shaped out on top for the comfort of the operator. Across the middle of the underpart of the seat are two strips located so as to be either side of the tube and which serve to retain the seat thereon and prevent lateral displacement. Between and at both ends of these strips are two wheels of hard rubber, fibre or similar material which run on the tube. These wheels are grooved out of a shape to suit the tube. At right angles to these strips are two or more side strips or brackets which each carry a soft tread wheel located to run on the floor. 70

The operator's weight on the seat is taken by the hard central grooved wheels on to the tube thereby keeping the tube in a stationary position on the floor. The side soft tread wheels only acting as a balancing or steadying for the seat and not carrying the weight of the user. 75

At the extreme rear end of the tube is a heart shaped tail piece of similar material to the seat and footboard and raised slightly above the top of the tube to act as a stop to the rearward movement of the seat. 80

In a preferred form of use the operator sits upon the moving seat with his feet placed against the footboard. The seat being normally in a forward position the operator obtains a resistant for movement of the seat rearwardly by pressure of the feet against the footboard. Simultaneously, with the backward pushing movement, the operator pulls upon the hand-grips until the limit of rearward movement is obtained, whereupon the operator relaxing the foot pressure and the pulling force, the seat is returned in a forward direction. This operation being repeated, all the essential movements of rowing or sculling are reproduced. 90

With the footboard detached from the tube and placed flat upon the floor the operator can stand upright on the domed surface, attach the extensible attachments to eyes in this surface of the footboard, and by a pulling and relaxing movement various alternative upright exercises are 105

obtainable.

Dated the 2nd day of January, 1936.
LESLIE W. LONDON.

COMPLETE SPECIFICATION

Improvements in or relating to Exercising Apparatus

I, LESLIE WHITTINGTON LONDON, 51, Vicarage Road, Kings Heath, Birmingham 14, of British Nationality, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

- 10 This invention relates to exercising apparatus which involves movements of the body and arms resembling those effected when rowing or sculling. The apparatus is of the type comprising a tubular frame member, or rail a footboard or footrests, a moving seat, and a pair of tension springs or extensible members which are anchored to the rail or a member thereon and provided with hand-
- 20 grips or handles. The present invention is designed to provide a simple, compact and inexpensive apparatus, which can be used as an indoor exerciser. According to this invention, the apparatus comprises a single longitudinally arranged tubular rail on which a seat is movably mounted with rollers on the seat bearing directly on the surface of the tubular rail, means being provided on the seat for coacting
- 30 with the floor or support on which the apparatus is arranged, to keep the seat in a substantially horizontal or balanced position. To facilitate storage of the apparatus when not in use the single tubular rail is formed in a plurality of sections detachably fixed together, a front section being shaped to form a support for a footboard or footrests which is or are detachably fixed to the tube.

Referring to the accompanying drawings, which illustrate a preferred form of the invention:—

Figure 1 is a perspective view of the apparatus

Figure 2 is an underside plan view, and

Figure 3 is a cross sectional elevation of the seat and the supporting rail, the section being taken on the line $x-x$

Figure 2.

In carrying out this invention the apparatus comprises a metal tubular rail 1 comprising two sections 1a, 1b which are detachably joined together end to end, the rail resting along the floor for the greater part of its length. The rail sections are connected by a screw 18 which passes through a hole in the wall of one

section engaging a tapped hole in the wall of a cylindrical projection 19 on the other section. This projection 19 ensures that the tubular section 1a, 1b are held in alignment. The forward part 1c of the tube 1 is bent upwardly to provide a support 2 at a certain angle for the footboard 3, the rail then passing along parallel with the floor for a short distance and is then curved down so that the extreme forward end stands upon the floor. A cross tube 4 is fitted so as to pass through and project an equal distance on either side of the main tubular rail at a point in the middle of the curve formed between the part 1c which passes along parallel with the floor and the part 1d which stands upon the floor. Holes 4a in the extreme ends of this cross tube act as anchors for the extensible attachments. The straight portion of the main tubular rail 1 and the extreme forward end of same have non-slipping feet 5 and 6 respectively.

Into the said holes 4a are connected a pair of extensible attachments in the form of tension springs 7 or rubber strands, one lying at each side of the tube 1, these extensible attachments being attached to the cross tube by detachable clips or other means and having terminal handles or hand-grips 8.

The footboard 3 is formed of wood, metal or other suitable material and is slightly domed or convex on the front surface to better fit the underside of the operator's feet. The footboard is detachably fitted to the supporting part 2 of the tube 1 with a bolt 9 passing through same and through the tube, the footboard being secured by a nut 10 on the underside of the tube. On the underside of the footboard are two raised strips or battens 3a between which is formed a channel, which in conjunction with the bolt 9 holds the parts 2, 1c and 1d of the tube in a vertical plane. The bottom edge of the footboard is notched out at 11 so that it drops over the straight portion of the tube 1 and rests upon the floor.

The seat 12 is formed of wood, metal or other suitable material and is shaped out on top for the comfort of the operator. Across the middle of the underpart of the seat are two strips 13 located so as to be either side of the tube 1 and which serve to retain the seat thereon and prevent lateral displacement. Between and at

both ends of these strips are two wheels 14 of hard rubber, fibre or similar material which run on the tube 1. These wheels are grooved out of a shape to suit the tube.
 5 At right angles to these strips are two more side strips or brackets 15 which each carry a soft tread wheel 16 located to run on the floor.

The operator's weight on the seat is
 10 taken by the hard central grooved wheels 14 bearing on the tube 1 thereby keeping the tube in a stationary position on the floor. The side soft tread wheels 16 only act as balancing or steadying wheels for
 15 the seat 12 and do not carry the weight of the operator.

At the extreme rear end of the tube 1 is a heart shaped tail piece 17 of similar material to the seat and footboard and
 20 arranged so that it is raised slightly above the top of the tube 1 to act as a stop to the rearward movement of the seat. This stop member has a cylindrical projection 17a thereon which detachably engages the
 25 rear end of the tube 1. This projection is split longitudinally and has a resilient insert which causes the projection to frictionally grip the internal wall of the tube 1.

30 In a preferred form of use the operator sits upon the moving seat 12 with his feet placed against the footboard 3. The seat being normally in a forward position the operator obtains a resistant for move-
 35 ment of the seat rearwardly by pressure of the feet against the footboard. Simultaneously, with the backward pushing movement, the operator pulls upon the hand-grips 8 until the limit of rearward
 40 movement of the seat is obtained, whereupon, the operator, relaxing the foot pressure and the pulling force, the seat is returned in a forward direction. The operation being repeated, all the essential
 45 movements of rowing or sculling are reproduced.

With the footboard 3 detached from the tube 1 and placed upon the floor, with the battens or strips 3a resting on the floor,
 50 the operator can stand upright on the domed or convex surface, attach the extensible attachments to eyes (not shown) on this surface of the footboard, and by a pulling and relaxing movement various

alternative upright exercises are obtain- 55
 able.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim 60
 is:—

1. Exercising apparatus of the type set forth, comprising a single longitudinally arranged tubular rail on which a seat is movably mounted with rollers on the seat 65 bearing directly on the surface of the tubular rail, means being provided on the seat for coacting with the floor or support on which the apparatus is arranged, to keep the seat in a substantially horizontal 70 or balanced position.

2. Exercising apparatus as set forth in Claim 1, in which the single tubular rail is formed in a plurality of sections detachably fixed together, a front section 75 being shaped to form a support for a footboard or footrests which is or are detachably fixed to the tube.

3. Exercising apparatus as set forth in Claim 1, in which the seat has parallel 80 guide strips on the underside between which are arranged a plurality of grooved rollers which bear on the surface of the tubular rail so that the seat can freely move along the rail whilst being pre- 85 vented from lateral displacement, and in which the seat has rollers which are located at points lying outside the rail and adapted to run upon the floor to balance the seat in a substantially hori- 90 zontal position.

4. Exercising apparatus as set forth in any of the preceding Claims, in which the tubular rail has a cross tube fixed thereto at the front end, such tube having tension 95 springs or extensible members anchored thereto.

5. Exercising apparatus as set forth in Claim 2, in which the rear end of the rear tubular section is provided with a member 100 which forms a stop for limiting the backward movement of the seat.

6. Exercising apparatus substantially as herein set forth or shown in the accom- 105
 panying drawings.

Dated the 11th day of March, 1937.

LESLIE W. LANDON.

[This Drawing is a reproduction of the Original on a reduced scale.]

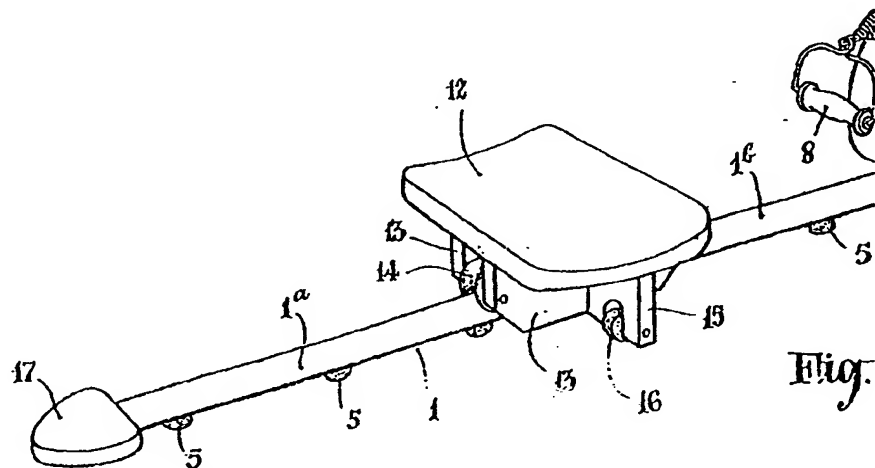


Fig. 1

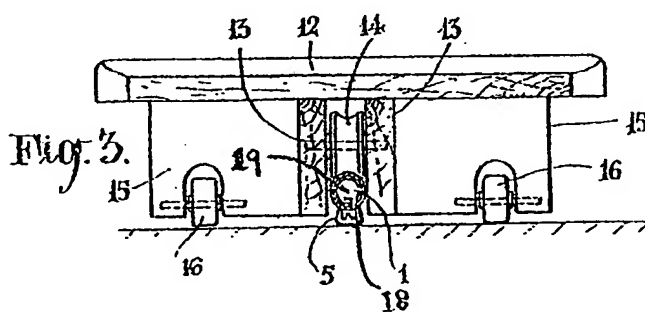
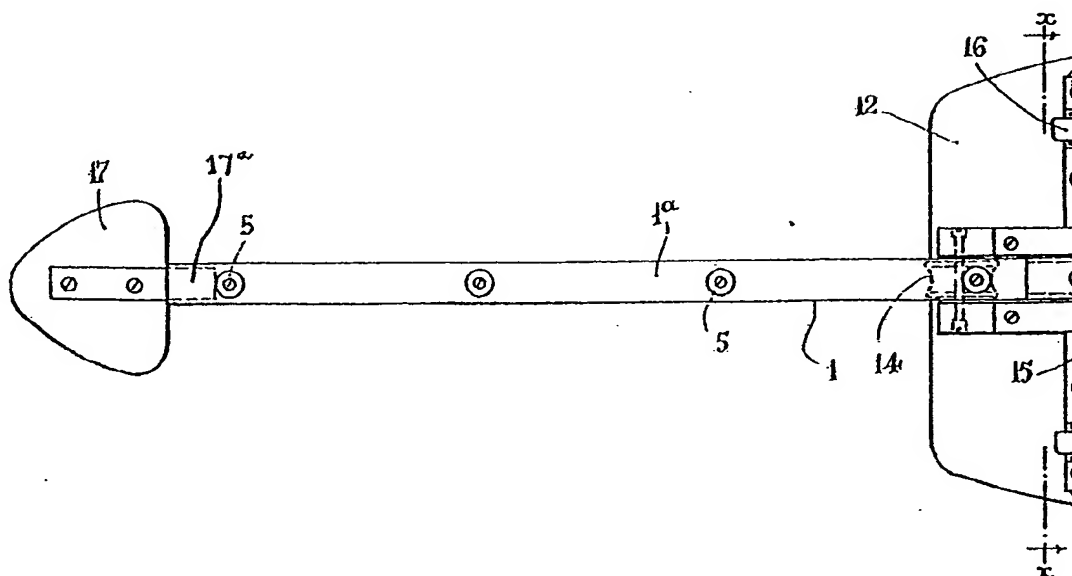


Fig. 3.

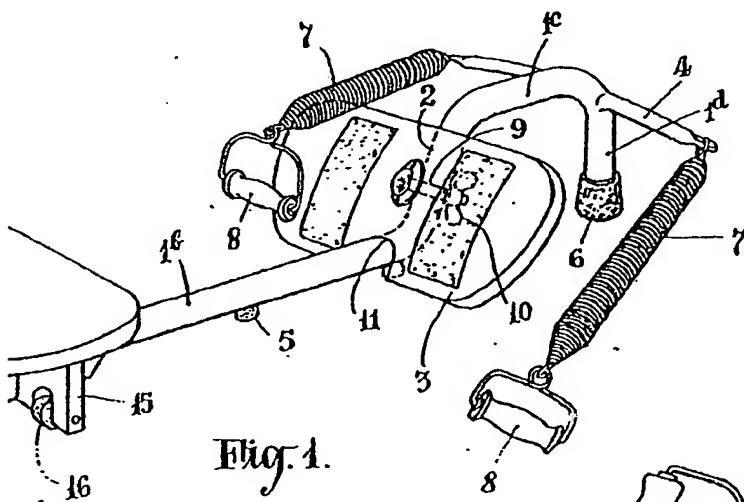


Fig. 1.

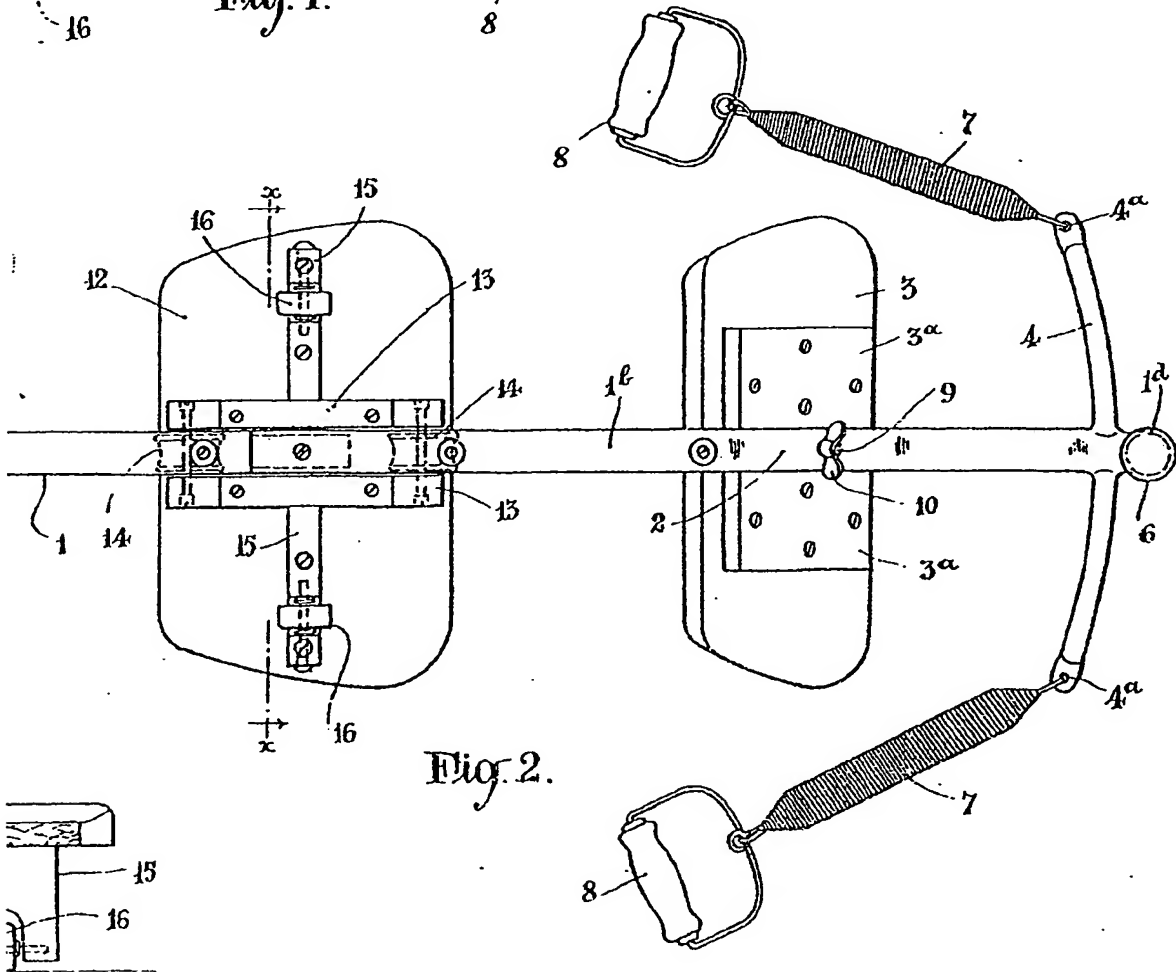
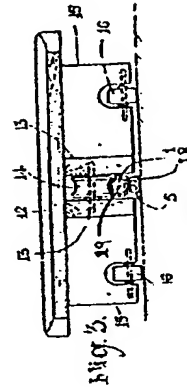
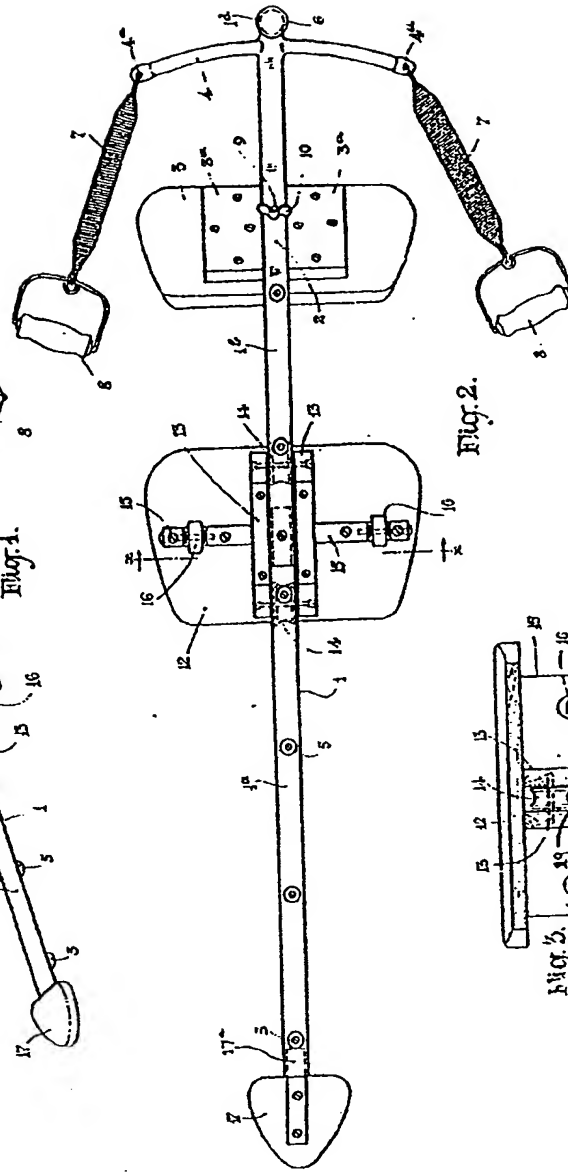
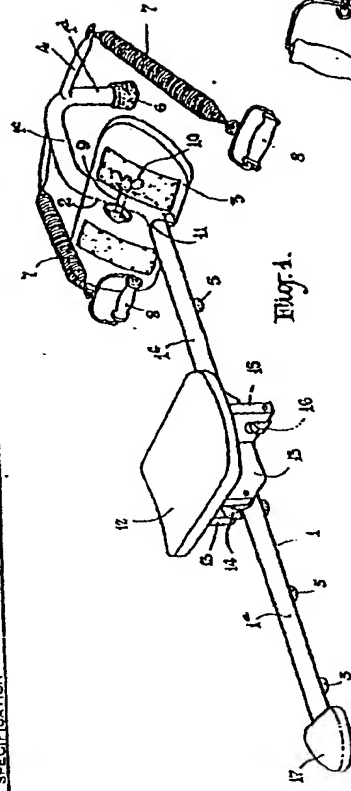


Fig. 2.



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